## UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

Participation of Distributed Energy Resource	)	Docket No.	RM18-9-000
Aggregations in Markets Operated by Regional	)		
Transmission Organizations and Independent System	)		
Operators	)		
	)		
<b>Distributed Energy Resources – Technical Considerations</b>	<b>s</b> )	Docket No.	AD18-10-000
for the Bulk Power System	)		

## **Panel 7: Ongoing Operational Coordination**

Statement of Matthew Glasser, Director of Consolidated Edison Company of New York, Inc. ("Con Edison") on Behalf of Con Edison and the Joint Utilities of New York

My name is Matt Glasser, representing both Con Edison and the Joint Utilities of New York (the "Joint Utilities"). Together, the Joint Utilities provide electric service to more than 13 million households, businesses, and government facilities across New York State.

We thank the Commission for establishing this forum in which to discuss the participation of distributed energy resource ("DER") aggregations in Regional Transmission Organization ("RTO") and Independent System Operator ("ISO") markets and DERs' impact on the nation's bulk power system. New York's Reforming the Energy Vision ("REV") initiative has already promoted wider deployment of DERs, such as distributed solar, energy storage, fuel cells and combined heat and power, and we expect this trend to continue. Some of these DERs may provide the grid and its operators with certain benefits, such as (i) wholesale services,

<sup>&</sup>lt;sup>1</sup> New York's investor-owned utilities include Con Edison, a New York corporation ("Con Edison"), Orange & Rockland Utilities, Inc., a New York corporation ("O&R"), Niagara Mohawk Power Corporation, a New York corporation d/b/a National Grid ("National Grid"), New York State Electric & Gas Corporation, a New York corporation ("NYSEG"), Rochester Gas and Electric Corporation, a New York corporation ("RG&E") and Central Hudson Gas & Electric Corporation, a New York corporation ("Central Hudson").

including capacity and energy, (ii) opportunities to defer transmission and distribution investments, and (iii) environmental benefits. To fully and correctly capture these values, and ensure efficient market operations, however, market rules will need to be developed and coordination between the RTOs/ISOs and distribution utilities will need to be enhanced. Fortunately, in New York, we are well on our way. Indeed, Con Edison and the Joint Utilities have been working closely with the New York Independent System Operator (the "NYISO") for more than a year to establish operating and planning requirements that may facilitate broad DER participation in its markets.

We agree with the Commission that participation of aggregated DERs in the wholesale electric markets is merited. DER resources that are capable of meeting the requirements of wholesale electric market participation should receive compensation directly from the wholesale markets for any capacity, energy and ancillary service capabilities they provide. When DERs are excluded from wholesale market participation, imperfect retail tariffs may be relied upon to approximate wholesale market value, which distorts price signals to the detriment of the system and customers. In addition, if DER penetration increases, as we anticipate, bulk power system operators may have increasingly less visibility into system conditions because DER would simply be seen as a load modifier. The resulting inability of both the utility and the RTO/ISO to differentiate between load and DER injections is generally unfavorable to both the distribution and bulk power systems, particularly at high DER penetration levels and during system contingencies. We therefore agree with the Commission that RTO/ISO rules must be revised to open their markets to qualifying DERs, subject to appropriate operating and communications protocols.

Because DER resources may impact, and be impacted by, the distribution systems to which they are interconnected, their participation in wholesale markets is not achievable by revising wholesale market rules alone. Distribution utilities play a vital role in facilitating DER integration and ensuring the safe, reliable and efficient operation of all distribution-connected resources participating in wholesale markets. Successful integration of DER will require significant coordination between distribution system operators (*i.e.*, utilities) and bulk power system operators (*i.e.*, RTOs/ISOs and utilities). Distribution system operators must have visibility into DER operations to safely and reliably manage the distribution system, especially during contingencies, as unexpected DER operation could complicate maintenance and restoration. For their part, bulk power system operators must be aware of operational constraints that may exist on the distribution system to avoid creating reliability issues and/or unsafe operating conditions.

I am here today to emphasize the distribution utility's critical role in DERs' wholesale market participation, and to discuss many of the proposals New York's utilities have developed with the NYISO. To fill the communication and operating gaps between the bulk power system and the distribution system, transparent processes, protocols and agreements (collectively, "processes") must be established among the distribution system operator, DERs, aggregators and the RTO/ISO. These include:

- Aligning interconnection, monitoring, and control requirements for resources installed on the distribution system seeking to participate in the wholesale electric markets;
- Establishing agreements between the utility and participating aggregators to, among other things (a) gain the aggregator's commitment to adhere to the RTO/ISO criteria for wholesale market participation, and (b) provide the utility with the aggregator's

- operating information to manage impacts on the utility's transmission and distribution system; and
- Establishing utility protocols that provide DERs and aggregators with information regarding the anticipated status and operations of the distribution system to effectively bid into and operate in wholesale markets on both a day-ahead and real-time basis.

The transparency of these processes is best achieved through stakeholder collaboration within each region, as regional – or even local – differences (such as differences in network design, distribution system operation, population density, topography and weather, among other things) can reasonably be expected to drive development of different types of DER technologies. This, among other things, could require different distribution system operations and unique processes to accommodate them. In New York, for example, we intend to test some of the draft processes that we had vetted through a Joint Utility stakeholder process as part of certain pilot projects we are undertaking with the NYISO beginning later this year. These are expected to change during initial implementation to adapt to the needs of the DERs, aggregators, utilities and the NYISO. While continual process enhancements, including increased automation, will undoubtedly be spurred by DERs' proliferation, it is important that a base structure be established prior to market implementation.

In summary, a "one-size-fits-all" approach cannot fairly be embraced for these processes, and the Commission need not look for one. Rather, protocols, processes, and agreements should be established to supplement the anticipated new RTO/ISO rules through communication and coordination among each RTO/ISO and their respective constituent state commissions, aggregators, customers and other stakeholders.

We encourage the Commission to permit all of these operating and planning processes to

develop in coordination with the development of wholesale market rules. Issues such as "dual

participation" (i.e., the ability of a distributed energy resource to fulfill distribution system needs,

while also participating as a resource in the RTO/ISO markets to satisfy bulk power system

needs) are best addressed by developing market rules in conjunction with operating and

planning processes. Doing so should allow for each piece to be appropriately tailored to meet

system reliability needs while also appropriately capturing DER value across both the

distribution and bulk power systems.

Thank you, again, for the opportunity to participate in this technical conference and discuss

important issues surrounding distribution-connected resource participation in the wholesale

electric markets.

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Respectfully submitted,

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